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THREE ATTACKS OF TYPHOID FEVER IN THE SAME PATIENT: THE THIRD ATTACK FOLLOWED BY FOUR RELAPSES.

By Joseph Leidy, Jr., M.D., Philadelphia.



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Considerable difference of opinion exists among writers as to the percentage of relapses in typhoid fever. This difference is doubtless in part to be attributed to care in distinguishing between (1) the so-called after-fever (Biermer) or post-typhoid elevation of temperature, which, as the term describes, is simply a sudden rise of temperature during defervescence or convalescence; rarely lasting longer than from a few hours to several days; and (2) the true relapse, which is accompanied by a return of several or of all of the more characteristic symptoms, and usually lasting from ten days to several weeks. A second and a third attack, after an interval of months or years, may be considered rare. The following are the notes of a case that I have had under observation since April last:

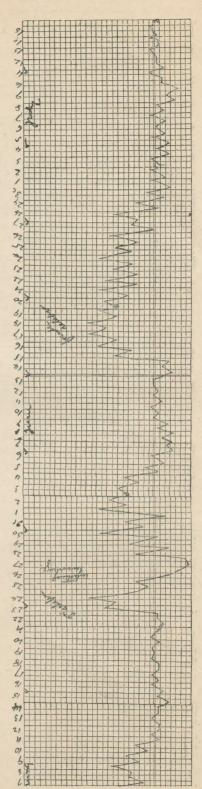
I. R., aged 34; born in Philadelphia; enjoyed excellent health until his sixteenth year, when he contracted typhoid fever (winter of 1873). The notes of this attack, taken from the case-book of Dr. Philip Leidy, describe a typical attack, extending over fifteen weeks, moderately severe, with frequent attacks of epistaxis. Spots were well marked and there was considerable diarrhea during the first two weeks. Nervous symptoms were never prominent.

The patient informs me that he never felt perfectly well during or after convalescence; to use his own words, he felt "out of sorts," and took medicine during the following summer, with little or no effect. In the early fall of 1873 he was treated for a slight diarrhea, attributed to some indiscretion in diet; though this was controlled, he again presented himself for treatment in the latter part of September, "being run down." Upon a thorough physical examination it was the opinion of Dr. Philip Leidy, who then attended him, that he was passing through a second attack of typhoid fever. He was put to bed, given liquid diet, and placed upon expectant treatment. The area of splenic dulness was considerably enlarged, the abdomen was tympanitic, and presented several rose-colored spots. During this attack there were no complications, with the exception of obstinate tympanites that resisted all medicinal treatment, but was finally overcome by the application of the ice-bag. The patient was confined to bed for seven weeks; his convalescence was rapid.

Until the latter part of January of this year he had enjoyed excellent health. Not feeling well at this time, he stopped work and left the city for rest, to return two weeks later unimproved. A week later he presented himself at Dr. Leidy's office for treatment; his symptoms at that time were suggestive of typhoid fever—"there was some hesitation in giving a positive opinion, knowing his previous history so well." He was put to bed, rest

³¹ Liebermeister, 8.6 per cent., Ziemssen's Encyclopedia, Vol. I; Henoch, 16.66 per cent., Charité Ann., II, 1875.

TEMPERATURE CHART OF THIRD ATTACK OF TYPHOID FEVER FOLLOWED BY FOUR RELAPSES. 31



and quiet insisted upon; a liquid diet was directed and quinine, two grains every fourth hour, was prescribed.

On February 27th I find the following condition recorded: Great prostration; severe headache and backache; the tongue furred moist, and tremulous; the respirations 20; pulse 108; temperature 103.2°; belly swollen, with tenderness, and marked gurgling in the right iliac fossa; area of splenic dulness increased; the first sound of the heart feeble, with a murmur (hemic) over the pulmonary cartilage; lungs negative. The urine was acid, with a specific gravity of 1020, amber-colored, with phosphates; no albumin or sugar was present, and the microscopical analysis was negative. There was sleeplessness, although nervous symptoms were not marked.

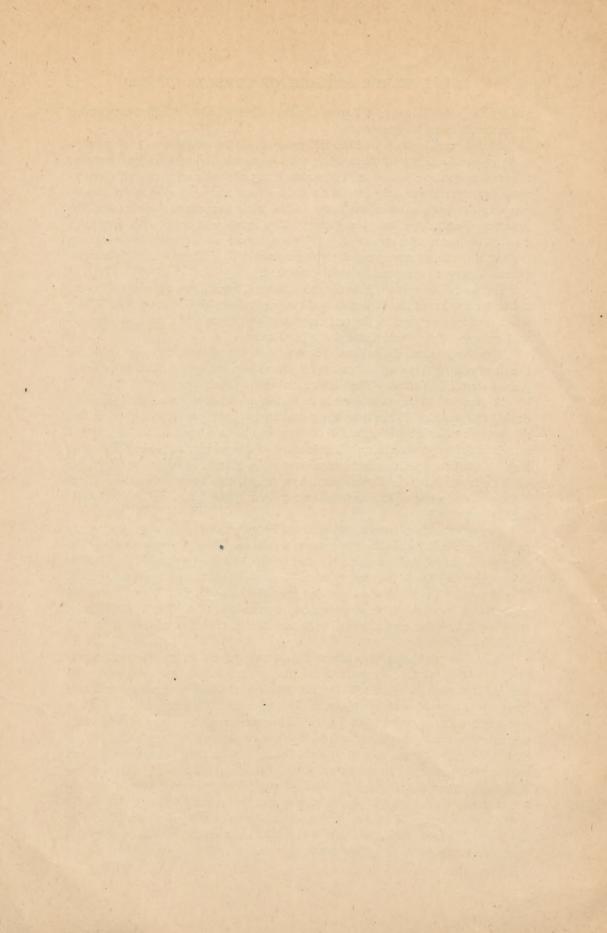
On the following day, February 28th, several typical rose-colored spots over the lower portion of the abdomen, and two on the left thigh, were noted. There was a profuse nosebleed in the early morning, and there was a marked tendency to diarrhea. The attack pursued a typical course.

The temperature-chart showed no less than four distinct relapses. During the third relapse there was a profuse intestinal hemorrhage, so that the case appeared almost desperate. The patient, however, slowly recovered.

A question of much interest is the cause of the relapses as they occurred during this attack. It has been suggested that the second attack of fever that this patient experienced, in the fall of 1873, was but a relapse following the first attack in the previous winter. The history of the patient's poor health, dating from the beginning of the first convalescence, in March, 1873, to the beginning of the second attack, in September, 1873, makes this theory tentative. That there was still some of the undeveloped poison lying latent in the system is highly probable.

During the third attack, dating from February of the present year, every possible precaution was taken to prevent a relapse. The patient was under the charge of a skilful trained-nurse, the diet liquid, and the water used was boiled. After the first relapse the supply of milk was changed and afterward boiled. The intestinal symptoms were decided from the beginning. The only possible explanation appeared to be self-infection, or auto-infection. Dr. J. M. DaCosta, who saw the case in consultation with me during the third relapse, concurred in this belief.

As a case presenting auto-inoculation as an explanation for an unusual number of relapses during typhoid fever, the treatment by intestinal antisepsis naturally suggested itself. Under the administration of hydro-naphthol and turpentine, convalescence was more rapid and more satisfactory during the last relapse than during any of the others. This may prove to be but coincidental; nevertheless it suggests a method of treatment not new, but worthy of further trial. The patient was confined to bed 145 days. At no time were there marked nervous symptoms or serious complication with the one exception referred to—intestinal hemorrhage during the third relapse. The urine on several occasions contained albumin, but not in greater quantity than would be accounted for by the degree of fever. The case presents an instance of unusual susceptibility to the typhoid poison, with some points of interest in reference to the etiology and treatment of relapses in typhoid fever.



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